

Sadao SUZUKI*: A revision of the genus *Sasaella*
Makino (Bambusaceae). (2)**

鈴木貞雄*: アズマザサ属の再検討 (2)**

2. *Sasaella Sasakiana* Makino et Uchida in Journ. Jap. Bot. 6: 15 (1929).
—*Arundinaria Sasakiana* Nakai in Journ. Jap. Bot. 10: 572 (1934).—*Nippono-*
bambusa Sasakiana (Makino) Muroi ex Sugimoto, New Keys Jap. Tr. 464
(1961).

Culms erect, attaining about 3 m or more in height and about 10 mm in diameter, robust, ramose at the upper portion of culms; three branches to a node. Culm- and leaf-sheaths, nodes, internodes and leaves all glabrous. Leaves lanceolate, chartaceous.

Nom. Jap.: Tôge-dake.

Specim. repres. Japan. HONSHU. *Rikuchû*: Oyama, Izawa-machi Izawa-gun (S. Uchida, Sept. 29, 1928-syntype in TI). *Rikuzen*: Aone spa, Shibata-gun (S. Suzuki, Aug. 1934). *Uzen*: Yamadera, Yamagata (S. Suzuki, Oct. 1956). *Iwashiro*: Nakanosawa, Inawashiro-machi, Yama-gun (S. Suzuki, Aug. 1955).

Distr. N. and C. Honshu, Japan.

Since the sprout is edible, the plants have been cultivated here and there, especially in the Tohoku district, therefore the habitat is indefinite.

3. *Sasaella sadoensis* (Nakai) S. Suzuki, comb. nov.

Arundinaria ramosa Makino var. *sadoensis* Nakai in Journ. Jap. Bot. 10: 572 (1934).

Culms 1 m or more in height. Culm-sheaths, nodes and internodes glabrous. Leaf-sheaths pilose with long hairs. Leaves lanceolate, chartaceous, glabrous on both surfaces.

Nom. Jap.: Sado-zasa.

Specim. repres. HONSHU. *Rikuchû*: Wano, Ohtsuji-machi, Kamihei-gun (S. Suzuki, Nov. 1956). *Iwaki*: Ohtakazawa, Shiroishi (Y. Ueno, Jul. 1973)

* [redacted] Chiba-city, Chiba Pref. 千葉市 [redacted] 〒280.

** Continued from Journ. Jap. Bot. 51: 97-103, 1976.

-Hb. Tamag.). *Iwashiro*: Yumoto spa, Ten-ei-mura, Iwase-gun (S. Suzuki, Oct. 1958). *Sado*: Shinkôji, Nigû-mura (F. Maekawa, Jul. 25, 1933-type in TI). *Ettyû*: Kureha Hill, Toyama (S. Suzuki, Aug. 1962).

Distrib. N. & C. Honshu, Japan.

This plant is distinct in having glabrous culm-sheaths and leaves and pilose leaf-sheaths.

4. ***Sasaella ramosa*** (Makino) Makino in Journ. Jap. Bot. 6: 15 (1929).—*Bambusa ramosa* Makino in Bot. Mag. Tokyo 14: 62 (1900).—*Sasa ramosa* Makino et Shibata in Bot. Mag. Tokyo 15: 24 (1901); Matsumura, Ind. Pl. Jap. 2: 97 (1905); Camus, Bamb. 20 (1913); Tsuboi, Illus. Jap. Bamb. 53 (1916); Makino in Journ. Jap. Bot. 5: 8 (1928).—*Arundinaria ramosa* Makino in Bot. Mag. Tokyo 14: 22 (1900).

Arundinaria ramosa Makino var. *viridiflora* Nakai in Journ. Jap. Bot. 10: 571 (1934), syn. nov.

Pleioblastus viridi-striatus (Sieb.) Makino var. *agrestis* Makino in Journ. Jap. Bot. 3: 11 (1926).—*Arundinaria viridistriata* var. *agrestis* Makino, ibid., pro syn.—*Sasa agrestis* Makino in Journ. Jap. Bot. 5: 20 (1928)—*Sasaella agrestis* (Makino) Makino in Journ. Jap. Bot. 6: 15 (1929), syn. nov.

Sasa hannoensis Makino in Journ. Jap. Bot. 3: 16 (1926).—*Sasaella hannoensis* Makino in Journ. Jap. Bot. 6: 15 (1929), syn. nov.

Sasa Okadana Makino in Journ. Jap. Bot. 5: 6 (1928).—*Sasaella Okadana* (Makino) Makino in Journ. Jap. Bot. 6: 15 (1929); Makino et Nemoto, Fl. Jap. ed. 2, 1401 (1931).—*Arundinaria Okadana* (Makino) Nakai in Journ. Jap. Bot. 10: 570 (1934), syn. nov.

Sasa matsushimensis Makino in Journ. Jap. Bot. 5: 16 (1928).—*Sasaella matsushimensis* (Makino) Makino in Journ. Jap. Bot. 6: 15 (1929).—*Arundinaria matsushimensis* (Makino) Makino ex Koidz. in Acta Phytotax. Geobot. 10: 295 (1941), syn. nov.

Sasa Komiyamana Makino et Hisauchi in Journ. Jap. Bot. 5: 21 (1928).—*Sasaella Komiyamana* (Makino) Makino in Journ. Jap. Bot. 6: 15 (1929).—*Arundinaria Komiyamana* (Makino) Nakai, l. c. 10: 569 (1934), syn. nov.

Sasaella musashiensis Makino et Nakai ex Nakai in Rika Kyôiku 15: 75 (1932), nom. nud.—*Arundinaria musashiensis* Nakai in Journ. Jap. Bot. 10: 578 (1934), Lat. diagn., syn. nov.

Sasaella nikkoensis Makino et Nakai ex Nakai in Rika Kyôiku 15: 76

(1932), nom. nud.—*Arundinaria nikkoensis* Nakai in Journ. Jap. Bot. 10: 578 (1934), Lat. diagn., syn. nov.

Arundinaria decipiens Nakai in Journ. Jap. Bot. 15: 521 (1939).—*Sasaella decipiens* (Nakai) Honda, Nom. Fl. Jap. ed. emend. 386 (1957), syn. nov.

Arundinaria toyomurensis Nakai in Journ. Jap. Bot. 10: 748 (1934).—*Sasaella toyomurensis* (Nakai) Nakai ex Koidz., l. c. 10: 298 (1941), syn. nov.

Arundinaria incantans Koidz., l. c. 3: 152 (1934).—*Sasaella incantans* (Koidz.) Koidz., l. c. 10: 297 (1941), syn. nov.

Arundinaria Sugimotoi Nakai in Journ. Jap. Bot. 10: 747 (1934).—*Sasaella Sugimotoi* (Nakai) Nakai ex Koidz., l. c. 10: 297 (1941), syn. nov.

Arundinaria mikurensis Nakai in Journ. Jap. Bot. 11: 3 (1935).—*Sasaella mikurensis* (Nakai) Nakai ex Koidz., l. c. 10: 297 (1941), syn. nov.

Arundinaria exsaniosa Koidz., l. c. 4: 81 (1935).—*Sasaella exsaniosa* (Koidz.) Koidz., l. c. 10: 296 (1941), syn. nov.

Arundinaria chikatsuafumiana Koidz., l. c. 4: 161 (1935).—*Sasaella chikatsuafumiana* (Koidz.) Koidz., l. c. 10: 296 (1941), syn. nov.

Sasa sasaelloides Makino et Uchida in Bull. Sci. Res. Alum. Ass. Morioka Coll. Agr. For. 12: 82 (1936).—*Arundinaria sasaelloides* Muroi in Journ. Pl. Iwate 2: 7 (1937).—*Sasaella sasaelloides* (Makino et Uchida) Makino et Uchida ex Koidz., l. c. 10: 297 (1941), syn. nov.

Arundinaria dimorpha Hackel in litt. anno 1889; Nakai in Journ. Jap. Bot. 11: 805 (1935).—*Sasaella dimorpha* (Hackel) Nakai ex Koidz., l. c. 10: 296 (1941), syn. nov.

Arundinaria Yonoskei Nakai in Journ. Jap. Bot. 11: 808 (1935).—*Sasaella Yonoskei* (Nakai) Nakai ex Koidz., l. c. 10: 298 (1941), syn. nov.

Arundinaria Sakaii Nakai in Journ. Jap. Bot. 12: 222 (1936).—*Sasaella Sakaii* (Nakai) Nakai ex Koidz. l. c. 10: 297 (1941), syn. nov.

Arundinaria confusa Nakai in Journ. Jap. Bot. 15: 521 (1939).—*Sasaella confusa* (Nakai) Honda, Nom. Pl. Jap. ed. emend., 386 (1957), syn. nov.

Arundinaria kisoensis Koidz., l. c. 8: 192 (1939).—*Sasaella kisoensis* Koidz., l. c. pro syn., syn. nov.

Arundinaria ramosa Makino var. *distichophylla* Koidz., l. c. 9: 77 (1940).—*A. distichophylla* Koidz., l. c. 10: 209 (1941).—*Sasaella distichophylla* Koidz., l. c. pro syn., syn. nov.

Arundinaria tsukubensis Koidz., l. c. 9: 77 (1940).—*Sasaella tsukubensis*

(Koidz.) Koidz., l. c. 10: 298 (1941), syn. nov.

Arundinaria kunimiana Koidz., l. c. 10: 210 (1941).—*Sasaella kunimiana* Koidz., l. c. pro syn., syn. nov.

var. **ramosa** f. **ramosa**

Culms 1-2 m in height, 4-8 mm in diameter. Culm- and leaf-sheaths, nodes and internodes glabrous. Leaves lanceolate to oblong-lanceolate, pubescent with soft hairs beneath, glabrous or thinly pubescent with white long hairs, sometimes rather densely puberulous with minute ones above.

Nom. Jap.: Azuma-zasa.

Specim. repres. Japan, HONSHU. *Mutsu*: Tamonoki, Hachinohe (S. Suzuki, Jul. 1956). *Rikuchû*: Shimo-machi, Maezawa (G. Koidzumi, Aug. 1941—as *S. sasaellioides* in KYO); Mizusawa (H. Iwabuchi, Oct. 18, 1940—type of *A. distichophylla* in KYO); Mt. Kunimi, Esashi-gun (H. Iwabuchi, Jul. 28, 1941—type of *A. kunimiana* in KYO). *Rikuzen*: Matsushima (S. Uchida, Sept. 1928—as *S. matsushimensis* in TI). *Iwaki*: Onahama, Iwaki (C. Saito, Aug. 8, 1932—type of *A. exsaniosa* in KYO); Nakahata, Yabuki-machi, Nishishirakawa-gun (S. Suzuki, Sept. 9, 1932—type of *A. confusa* in TI). *Iwashiro*: Tadano, Kôriyama (S. Suzuki, Jul. 1958). *Hitachi*: Mt. Tsukuba (G. Koidzumi, Aug. 26, 1940—type of *A. tsukubensis* in KYO). *Shimotsuke*: Kirifuri, Nikko (T. Nakai, Jul. 1929—type of *A. nikkoensis* in TI). *Kôzuke*: Tatebayashi (K. Hisauchi, Oct. 1, 1922—syntype of *S. agrestis* in TI); Mt. Haruna, Gumma-gun (T. Sakai, no. 1825, Sept. 8, 1935—type of *A. Sakaii* in TI). *Musashi*: Koganei (T. Makino, May 1894—type in TI); Hanno, Iruma-machi (G. Koidzumi, Aug. 1939—as *S. hannoensis* in KYO). *Kunitachi* (T. Nakai, Nov. 3, 1929—as *A. musashiensis* in TI). *Shimofusa*: Yachimata-machi, Imba-gun (C. Suzuki, Sept. 5, 1934—type of *A. decipiens* in TI). *Sagami*: Manazuru Point (S. Suzuki, May 1968). *Kai*: Yato, Ôizumi-mura, Kitakoma-gun (S. Suzuki, Sept. 1968). *Shinano*: Chigono, Fukushima, Kiso-gun (G. Koidzumi, Aug. 17, 1936—type of *A. kisoensis* in KYO); Ohgejô-mura, Shimoina-gun (J. Sugimoto, no. 1834, Oct. 1932—type of *A. Sugimotoi* in TI); Yutaka-mura, Shimoina-gun (M. Furuse, no. 12, Sept. 29, 1932—type of *A. toyomurensis* in TI). *Echigo*: Kasugayama, Takada (J. Yoshikawa, Aug. 1963—Hb. Tamag.). *Suruga*: Gotemba (K. Hisauchi, Aug. 1928—as *S. komiyamana* in TI). *Echizen*: Ashihara-machi, Sakai-gun (K. Matsumura, Sept. 1974—Hb. Tamag.). *Mino*: Fujimidai, Nakatsugawa (K. Tsuchida, Jul. 1971—Hb. Tamag.). *Ohmi*: Sasao

Pass, Kamakake-mura, Gamô-gun (C. Hashimoto, no. 2974, Jun. 23, 1935—type of *A. chikatsuafumiana* in KYO). *Settsu*: Arima (N. Ui, no. 57, Jul. 27, 1934—type of *A. incantans* in KYO). *Bingo*: Taishakukyô, Hiba-gun (S. Suzuki, Jun. 1935). *Iwami*: Tomiyama, Ohta (S. Uchida, Jun. 1952—Hb. Tamag.). *Nagato*: Ohkurayama, Atô-machi, Abu-gun (N. Miake, Aug. 1968—Hb. Tamag.).

Distrib. Endemic to Honshu, Japan.

This plant is characterized by glabrous culms and pubescent leaves beneath. There are several types of the upper surface of leaves as to the smoothness and hairiness. The typical f. *ramosa* and *A. Sakaii* have puberulous leaves only near the base. In *A. nikkoensis* the leaves are puberulous near the midrib. *S. matsushimensis*, *S. Komiyamana* and *S. dimorpha* are entirely glabrous. *S. agrestis*, *S. hannoensis* and *S. musashiensis* are densely pubescent with short hairs all over. *S. Okadana* and *S. incantans* are sparsely pilose with long hairs. *S. confusa* is pubescent with long hairs mixed with minute ones.

The typical f. *ramosa* and some others have glabrous internodes, while *A. exsaniosa* and *A. Sugimotoi* have puberulous internodes. The presence or absence of hairs on the upper surface of leaves or on internodes belongs to the individual variation.

Koidzumi separated *S. kunimiana* from the typical forma by the leaves broader and subcordate at the base, against the rounded base in the latter. But such a character is frequently seen in the other species of the genus, especially when the culms are cut off, the shoots tend to bear broader and subcordate leaves.

f. **tomikusensis** (Nakai) S. Suzuki, comb. nov.

Arundinaria tomikusensis Nakai in Journ. Jap. Bot. 10: 744 (1934).—*Sasaella tomikusensis* (Nakai) Nakai ex Koidz. in Acta Phytotax. Geobot. 10: 298 (1941).

Arundinaria pubescens Nakai, l. c. 10: 746 (1934), syn. nov.

Arundinaria Otayana Koidz., l. c. 4: 162 (1935).—*Sasaella Otayana* (Koidz.) Koidz., l. c. 10: 297 (1941), syn. nov.

Arundinaria Tsurumatiana Koidz., l. c. 8: 114 (1939).—*Sasaella Tsurumatiana* (Koidz.) Koidz., l. c. 10: 298 (1941), syn. nov.

Nodes densely pilose with long hairs. Otherwise as in type.

Nom. Jap.: Tomikusa-zasa.

Specim. repres. Japan. HONSHU. *Iwaki*: Shimokamishiro, Iwaki (S. Suzuki, Jul. 1953). *Iwashiro*: Mt. Myōkenzan, Kōriyama (S. Suzuki, Jul. 1955). *Hitachi*: Mt. Tsukuba (H. Tsurumachi, Jun. 25, 1939—type of *A. Tsurumatiana* in KYO). *Shimotsuke*: Karasuyama-machi, Nasu-gun (S. Suzuki, Jun. 1954). *Kōzuke*: Numata (T. Takei, Dec. 1958—Hb. Tamag.). *Shinano*: Tomikusamura, Shimoina-gun (J. Sugimoto, no. 1522, Oct. 1932—type in TI); Asagemura, Shimoina-gun (J. Sugimoto, no. 1837, Sept. 1932—type of *A. pubescens* in TI). *Ettyū*: Asahi, Himi (T. Otake, Oct. 12, 1935—type of *A. Otayana* in KYO). *Echizen*: Kanatsu-machi, Sakai-gun (K. Matsumura, Sept. 1974—Hb. Tamag.).

Distrib. Endemic to C. Honshu, Japan.

var. *latifolia* (Nakai) S. Suzuki, comb. nov.

Sasaella benten Makino et Nakai ex Nakai in Rika Kyōiku 15: 75 (1932), nom. nud.

Arundinaria ramosa Makino var. *latifolia* Nakai in Journ. Jap. Bot. 10: 571 (1934).

Arundinaria velutina Nakai in Journ. Jap. Bot. 10: 580 (1934), syn. nov.

Arundinaria yessaensis Koidz. in Acta Phytotax. Geobot. 6: 278 (1937).—

Sasaella yessaensis (Koidz.) Koidz., l. c. 10: 298 (1941), syn. nov.

Arundinaria nambuensis Koidz., l. c. 10: 210 (1941), syn. nov.

f. *latifolia*

Leaf-sheaths densely puberulous with minute hairs, sometimes mixed with long ones. Otherwise as in type.

Nom. Jap.: Ohba-azuma-zasa, Benten-zasa.

Specim. repres. Japan. HONSHU. *Rikuchū*: Mt. Kunimi, Esashi-gun (H. Iwabuchi, Jul. 28, 1941—type of *A. nambuensis* in KYO). *Rikuzen*: Aobayama, Sendai (S. Suzuki, Oct. 1971). *Iwaki*: Isobe, Sōma (S. Suzuki, Aug. 1934). *Iwashiro*: Shinobu Hill, Fukushima (S. Suzuki, Aug. 1958). *Hitachi*: Fukuroda, Kuji-gun (S. Suzuki, Oct. 1967). *Shimotsuke*: Terago, Nasu-gun (T. Waku, Jul. 1969—Hb. Tamag.). *Kōzuke*: Narushima, Tatebayashi (S. Suzuki, Sept. 1965). *Musashi*: Senkawa, Tokyo (T. Nakai, Nov. 3, 1929—type of *A. velutina* in TI). *Sado*: Nigū (Y. Ikegami, no. 419, Sept. 28, 1935—type of *A. yessaensis* in KYO). *Shinano*: Asama spa, Matsumoto (S. Yamashita, Oct. 1974—Hb. Tamag.). *Bittyū*: Adachi, Niimi (T. Yamanaka, Oct. 1972—Hb. Tamag.).

Distrib. Honshu, Japan.

This plant is slightly different from var. *ramosa* by densely puberulous leaf-sheaths.

f. *trichophila* (Koidz.) S. Suzuki, comb. nov.

Arundinaria trichophila Koidz. in Acta Phytotax. Geobot. 4: 83 (1935).—*Sasaella trichophila* (Koidz.) Koidz., l. c. 10: 298 (1941).

Nodes densely pilose with long hairs. Internodes puberulous with retrorse minute hairs.

Nom. Jap.: Oni-urajiro-shino.

Specim. repres. Japan. HONSHU. *Iwashiro*: Benten Hill, Fukushima (M. Kusunoki, Jul. 1954—Hb. Tamag.). *Ohmi*: Binmanji, Taga-mura, Inugami-gun (C. Hashimoto, Oct. 22, 1933—type in KYO).

Distrib. Honshu, Japan.

This plant is slightly different from the typical var. *latifolia* by pilose nodes. Then I propose to reduce it to a forma of the latter.

var. *Suwekoana* (Makino) S. Suzuki, comb. nov.

Sasa Suwekoana Makino in Journ. Jap. Bot. 5: 7 (1928).—*Sasaella Suwekoana* Makino, l. c. 6: 15 (1929); Makino et Nemoto, Fl. Jap. ed. 2. 1401 (1931); Nakai in Rika Kyōiku 15: 76 (1932).—*Arundinaria Suwekoana* (Makino) Nakai in Journ. Jap. Bot. 10: 573 (1934).

Leaves thick, coriaceous-chartaceous, subrevolute on one side, longitudinally wrinkled, sparsely pilose with long hairs on the upper surface, pubescent with soft hairs beneath.

Nom. Jap.: Sueko-zasa.

Specim. repres. Japan. HONSHU. *Rikuchū*: Higashiyama-machi, Higashi-iwai-gun (Y. Ikegami, Aug. 1953—Hb. Tamag.). *Rikuzen*: Kameoka Hill, Sendai (S. Suzuki, Dec. 1956); Aobayama, Sendai (S. Suzuki, Oct. 1971); Akiu, Natori-gun (A. Kimura, Oct. 1934—Hb. Tamag.).

Distrib. Endemic to N. Honshu, Japan.

This plant shows a peculiar aspect in the field, but in the herbarium it is rather difficult to discriminate from *S. ramosa*. Therefore I propose to reduce it to a variety of the latter. It is strange that the variety is restricted to provs. Rikuzen and Rikuchū, having its center of distribution in Sendai.

5. *Sasaella Sawadai* (Makino) Makino ex Koidzumi in Acta Phytotax. Geobot. 10: 297 (1941).

Pleioblastus Sawadai Makino in Journ. Jap. Bot. 4: 3 (1927); Makino & Nemoto, Fl. Jap. ed. 2, 1379 (1931).—*Arundinaria Sawadai* (Makino) Nakai in Journ. Jap. Bot. 10: 573 (1934).

Sasaella Marunoi Hatusima in Journ. Geobot. 20: 36 (1972), syn. nov.

Culms attaining about 2 m in height, one to three branches to a node. Culm- and leaf-sheaths, nodes and internodes glabrous. Leaves lanceolate, rounded at base, attenuatedly acuminate at apex, chartaceous, pubescent beneath.

Nom. Jap.: Hakone-shino (nov.), Hakone-medake.

Specim. repres. Japan. HONSHU. *Kōzuke*: Sayama, Numata (S. Suzuki, Nov. 1956). *Musashi*: Mt. Takao (M. Honda, Jun. 1926—TI). *Sagami*: Ashinoyu, Hakone (S. Suzuki, Jul. 1969); Hakone (K. Hisauchi, Jan. 1920—isotype in TI).

KYUSHU. *Chikuzen*: Yahazu Pass, Mt. Seburi (S. Suzuki, Aug. 1972). *Satsuma*: Makurazaki (K. Maruno, Aug. 1974, topotype of *S. Marunoi* in Hb. Tamag.).

Distrib. Honshu and Kyushu, Japan.

This species is similar to *S. ramosa*, but differs from it by two or three branches to a node. *S. Marunoi* Hatusima from prov. Satsuma is hardly separable from *S. ramosa* by the original diagnosis. I have never examined the type specimen, but according to Maruno's topotype specimen who is the collector of the type, two branches are issuing from a node, then it may well be that *S. Marunoi* will be synonymous with *S. Sawadai*.

○テリハアザミの一変種について (渡辺定元・今江正知) Sadamoto WATANABE & Seichi IMAE: A new variety of *Cirsium lucens*

1973年10月、熊本県八代郡泉村の平家落人部落として知られている五家荘における原生林の自然環境保全調査を行なった際、筆者等は、ブナ林床に生ずる苞葉の多いテリハアザミの一種を採集した。

このアザミは、苞葉が多いほか、葉の表面が粗渋で光沢がなく、総苞片が狭く、苞片の列の数が多いたところがテリハアザミと異なる。全体の姿は、光沢がなく有毛の変種カツラカワアザミに似ているが、上記の苞葉、総苞の特徴のほか、葉の表面の毛の種類も異なる。なお、茎には蛛網状と細軟毛の2種類の毛が生じている。テリハアザミの変種とし、和名は、平家部落の五家荘から宮崎県椎葉村に連なる九州中央山地のブナ原生林に産することから、ヘイケモリアザミとする。